

CWE Flow-Based Market Coupling

Subject: Answer to Market open letters on transparency and 20% minimum RAM application dated Oct. 31 2018

Dear members and representatives of EFET, IFIEC and MPP,

On October 31st, 2018, market parties' associations (EFET, MPPs and IFIEC Europe) have sent two open letters to CWE regulators: the first one regarding the transparency of data provided by TSOs in the framework of flow-based market coupling and the second one regarding the rule guaranteeing 20% of minimum RAM in flow-based market coupling and its application.

In response to these letters, CWE TSOs would like to bring some clarifications regarding the status of the various transparency requests mentioned by the market parties in their letter and would like to report on the progress made so far on transparency in the CWE region. Some background information to demand by market parties on the 20% minimum RAM process will also be provided below.

On the open letter on transparency:

From the launch of the flow-based market coupling onwards, CWE TSOs have been committed in improving transparency of the flow-based market coupling processes. This is shown by the implementation of all transparency requests included in the NRAs position paper of March 2015 as well as almost all (except for request 11 in annex 1) the transparency improvements discussed with the market parties in the CCG meeting of November 19th, 2015. An overview of this initial scope is presented in Annex 1 to this letter.

Moreover, CWE TSOs have put great efforts in constructively consulting with market parties on transparency issues (via the consultative groups meeting and other fora) during which new transparency requirements have continuously been put forward leading to enlarging the initial scope to a great extent. CWE NRAs have subsequently issued a new position paper in September 2018 in which their support in the implementation of some of these additional requirements has been confirmed.

CWE TSOs have therefore assessed these additional requirements from a technical and a legal perspective and developed a road map associated to the implementation of the requirements included in the latest NRA position paper. The result of this assessment can be found in annex 2 with the corresponding implementation road map in annex 3. These documents have been presented to the CWE NRAs on November 16th, 2018. In this call it was jointly concluded that for some requests further alignment and clarification is required between CWE NRAs and TSOs before the implementation can be prepared. The feasibility of all other market parties' requirements not part of the second NRAs position paper will be assessed in a second step and presented to the market parties during the consultative group meeting currently foreseen end of Q1 2019.

Moreover, we acknowledge, the issues about quality and completeness of the published data highlighted in your letter. CWE TSOs continuously work on improvements in this respect. Please note that some of the items raised have already been resolved while writing this letter.

On the open letter on the application of the 20% minimum RAM:

The 20% minimum RAM process has been put in place for business day April 26th 2018. Due to the fast implementation necessary, from that date onwards till October 1st, 2018 the process has relied on a manual procedure since the industrialized solution was not available on short notice. CWE TSOs have informed the regulators and the market parties on the risks associated to the application of this non-industrialized solution in terms of reliability and availability of the systems.

As of October 1st 2018, the industrialized solution is in operation and it is expected to lead to a more robust process. Nonetheless, CWE TSOs follow the rules and regulations according to the approval package and the choice for applying or not the 20%min RAM also depends on a security assessment and depending on the outcome, it could be decided that 20%min RAM cannot be applied.

CWE TSOs took note on the additional requests for information related to the 20% minimum RAM process put forward by the market parties and therefore discussed with CWE NRAs on further improvements of the implemented process. CWE NRAs indicated that they will provide CWE TSOs with guidance on the level of justification of the 20% minimum RAM exclusion expected. The results of the alignment between CWE NRAs and TSOs will be presented to the market parties once available.








CWE TSOs are confident that the information provided in this letter show their high level of commitment on the transparency issues. For CWE TSOs, transparency has a high priority and significant resources have been invested in assessing and implementing various requests. We take market parties concerns as well as the need for a level playing field seriously while respecting technical, legal and security-related limitations.






We are therefore looking forward to constructively continue the dialogue with market parties' representatives in that respect.

Best regards,




CWE Transmission System Operators

ANNEX 1 - Initial Transparency Scope

Name of measure	Description of measure	Status	
1. CBCO drivers	<ul style="list-style-type: none"> Identify what the elements (production, grid lines, phase-shifters...) are that impact the PTDFs and RAMs? Provide transparency on the remedial actions taken by TSOs that affect the CBCOs 	<ul style="list-style-type: none"> Q1 2016: requested information provided → <i>Pedagogical Information on Transparency Proposals (FV).pptx</i> 	
2. CBCO publication	<ul style="list-style-type: none"> Publication of PTDFs and RAMs for more typical scenarios Best scenarios will be defined based on the feed-back on suggestion n°1 	<ul style="list-style-type: none"> Q1 2016: SPAIC approach developed → <i>CWE Standard Approach for Changes (FV).pptx</i> 	
3. Max imports and exports	<ul style="list-style-type: none"> Explain how the limits are assessed in the methodology 	<ul style="list-style-type: none"> Q1 2016: SPAIC approach developed → <i>CWE Standard Approach for Changes (FV).pptx</i> 	
4. Phase shifters	<ul style="list-style-type: none"> Provide operational procedure to explain how phase-shifters are integrated in the flow-based process. 	<ul style="list-style-type: none"> Q1 2016: requested information provided → <i>Pedagogical Information on Transparency Proposals (FV).pptx</i> 	
5. CBCO publication comments	<ul style="list-style-type: none"> Publication of a comment at the moment of the PTDF publication (8.00 am) when there is a significant unexpected change in the CBCO matrix. 	<ul style="list-style-type: none"> Q1 2016: SPAIC approach developed → <i>CWE Standard Approach for Changes (FV).pptx</i> May 2017: CWE Message Board implemented, with the objective to inform MPs on unexpected issues 	
6. CBCO publication warnings	<ul style="list-style-type: none"> Early warning where there is an expected change in the PTDF matrix (ideally quantitative data, if not possible qualitative information should be provided). e.g. PTDF of 26/08/15 where BE imports have been reduced to 3.2GW – this information should be announced 1 week before. 	<ul style="list-style-type: none"> Q1 2016: SPAIC approach developed → <i>CWE Standard Approach for Changes (FV).pptx</i> 	
7. Identify "Intuitive"	<ul style="list-style-type: none"> Flag hours in which the intuitive patch was applied 	<ul style="list-style-type: none"> March 2016: included in PX report 	

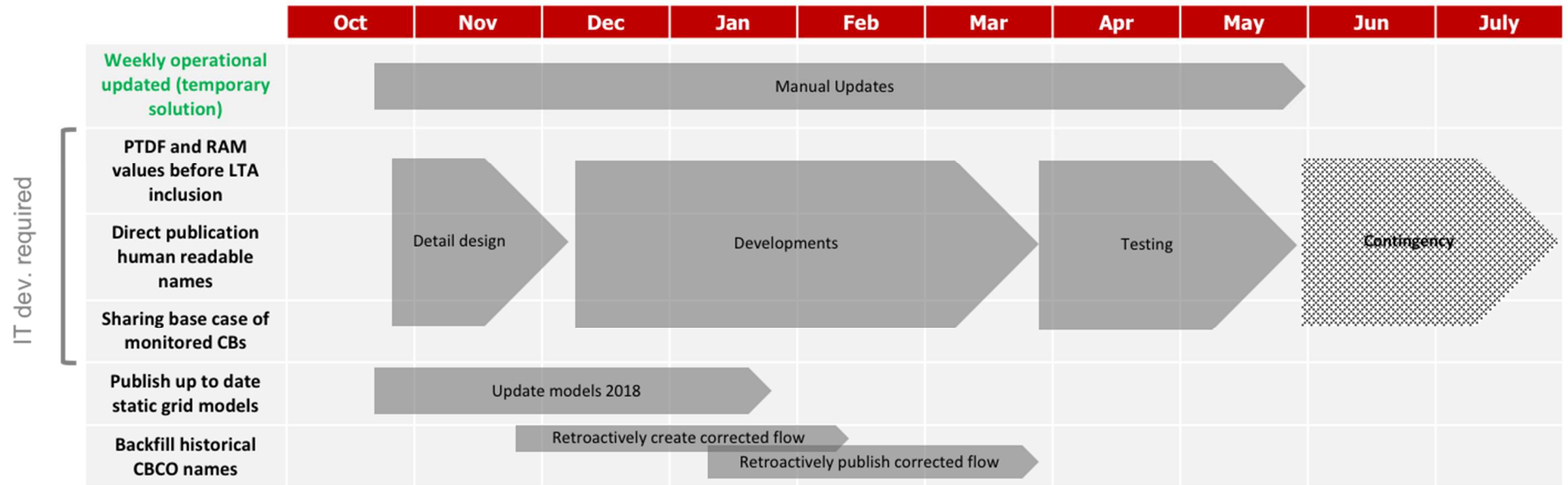
patched" hours			
8. D2CF and CGM data	<ul style="list-style-type: none"> • Publication on JAO utility tool of the production by technology (currently, in the ex-post publication of the D2CF parameters, the vertical load, the generation and the best forecast of the net position are published. This data set should be completed by publishing the generation per technology, at least wind and solar). • Break down the above data by control area 	<ul style="list-style-type: none"> • Q3 2016: publication aggregated D2CF data on hub level • September 2016: Publication of aggregated D2CF data on TSO level as requested 	
9. RAM and FRM margin	<ul style="list-style-type: none"> • Break down RAM into FMAX, FREF, FRM and FAV in each Fixed-Id file 	<ul style="list-style-type: none"> • Q3 2016: Elia, RTE & TTN publication of translation table with human readable names • May 2017: Daily publication detailed breakdown of RAM via JAO utility tool 	
10. Critical Branches	<ul style="list-style-type: none"> • Separate CB and CO identification in fixed ID format (or non-fixed if still used) • Mapping between ID and real lines 	<ul style="list-style-type: none"> • Q3 2016: Elia, RTE, TTN and APG Publication of translation table with human readable names • May 2017: publication human readable names and detailed breakdown for all CWE TSOs 31/05/2017 (trading day) 	
11.GSK harmonization & transparency	<ul style="list-style-type: none"> • Publication of the actual computation process (Are some units excluded? Is the max power output taken into account? What hour blocks are used?). • Publish a "fixed-id" GSK file per node per hour 	<ul style="list-style-type: none"> • Covered by FRM forecasting study, 3 pending activities: <ul style="list-style-type: none"> ○ Assessment of PST adjustment impact ○ Analysis of outliers ○ Review of final report • Activity put on hold, due to high priority topics 	Not Scheduled
12. Keep documentation up to date	<ul style="list-style-type: none"> • Update the Reference Document and its Annexes each time there is a methodology change 	<ul style="list-style-type: none"> • Ongoing: approval documents are updated in alignment with and on request of NRAs once a methodology changed • Updated methods are shared with MPs via JAO website 	
13. Hotline	<ul style="list-style-type: none"> • Put in place a technical and commercial interface in addition to Q&A 	<ul style="list-style-type: none"> • 2015: Q&A forum implemented prior flow-based go-live • Q2 2016: improvements Q&A implemented • September 2018: improved JAO website for easier references and layout of documents • Today: CWE project partners are working on further improvements in alignment with MPs, e.g. RSS feed 	

ANNEX 2 – Additional transparency request

Name of measure	Description of measure	Status	
1. Publication of individual static grid models	<ul style="list-style-type: none"> Each individual TSO to publish a static grid model on their website 	<ul style="list-style-type: none"> TSOs published this prior flow-based go-live TSOs will update their static grid model on a yearly basis. The next update is foreseen for January 2019 	IN PROGRESS
2. Publication of AMR	<ul style="list-style-type: none"> Show on which CBs AMR was applied. NRAs ask in their position paper (Sept 2018) to also publish the justification for exclusions 	<ul style="list-style-type: none"> October 2018: With the go-live of the DE-AT split, application of AMR is published on a daily basis via the JAO utility tool 	
3. Pedagogical materials for MPs	<ul style="list-style-type: none"> Presentations about the working of <ul style="list-style-type: none"> Qhull algorithm PDF computation DC load flow computation Net position computation 	<ul style="list-style-type: none"> October 2018: TSOs published this information on JAO website on 05/10/2018 	
4. Backfill historical CBCO names	<ul style="list-style-type: none"> Correct wrong CBCO names as published in utility tool since FB go-live 	<ul style="list-style-type: none"> TSOs are working on a technical solution to backfill historical CBCOs, expected Q1 2019 	IN PROGRESS
5. Update translation tables	<ul style="list-style-type: none"> As a temporary measure, TSOs are requested to regularly update the translation table with new CBCOs 	<ul style="list-style-type: none"> Q3 2018: TSOs established a process to keep the table up-to-date until the industrialized solution is in place (utility tool). 	
6. Remove anonymization	<ul style="list-style-type: none"> Remove anonymization process from FBCE so that CBCOs in the utility tool be can immediately recognized 	<ul style="list-style-type: none"> TSOs are working on an IT change to remove the anonymization process. This request has high impact on TSOs common system. IT release planning needs to be considered. 	IN PROGRESS
7. Additional CBCO description sheet in the utility tool	<ul style="list-style-type: none"> Publish CBs and COs separately in the utility tool so that the mapping can be more precise 	<ul style="list-style-type: none"> TSOs are working on an enduring solution. This request will be redundant after anonymization is removed (see item 6) 	IN PROGRESS

8. Share PST tap ranges	<ul style="list-style-type: none"> Share the PST tap ranges used for coordination 	<ul style="list-style-type: none"> October 2018: TSOs published this information on JAO website on 17/10 	
9. Share schemes of substations	<ul style="list-style-type: none"> Share coupling of bus bars 	<ul style="list-style-type: none"> Technically convoluted process: Busbars change during the day, so no single value can be shared. 	NOT SCHEDULED
10. Share base case for monitored CBs	<ul style="list-style-type: none"> Share the initial FB domain: all flows without RAs 	<ul style="list-style-type: none"> CWE TSOs can agree to publish the initial FB domain (no dedicated domain, including some RAs for some TSOs). The timing of publication is to be aligned amongst TSO experts. 	IN PROGRESS
11. Updated Refprog, including non-CWE borders	<ul style="list-style-type: none"> MPs ask for the Refprog from bordering TSOs (such as DK, NO, UK) to be included in the currently published Refprog sheet 	<ul style="list-style-type: none"> Information already available via non-CWE TSOs – see Utility Tool CWE NRAs and TSOs agreed to check if the information is already published and align with neighboring NRAs to have approval for publication 	IN PROGRESS
12. Aggregated D2CF publication in D-1	<ul style="list-style-type: none"> Publish the aggregated D2CF in D-1 instead of D+2 	<ul style="list-style-type: none"> For some TSOs, publication goes against TSO security policies 	NOT SCHEDULED
13. Publish static grid model via D2CF	<ul style="list-style-type: none"> MP-proposed quick win: honor most of their requests by publishing a daily extract of transmission part of the D2CF 	<ul style="list-style-type: none"> Creating a yearly harmonized update would require significant effort for a one-time extract process, as well as harmonized CB naming conventions. Changes in systems needed for extraction of transmission part from D2CF. 	NOT SCHEDULED
14. Publication of future outages	<ul style="list-style-type: none"> Publish all the impacting internal and cross-border outages in the utility tool in D-2 and also their impact on the FBMC. 	<ul style="list-style-type: none"> CWE NRAs and TSOs agreed to further align on this request and its feasibility: Publication of relevant outages and their impacts towards MPs is framed in clear guidelines detailing when SPAICs are required In case of short-duration outages (out of scope of SPAIC process), forecast of impact may not be accurate and can provide misleading information to MPs. CWE NRAs and TSOs agreed to further align on the feasibility to support the request for short-term outages 	IN PROGRESS
15. GSK Detailed breakdown	<ul style="list-style-type: none"> Provide more detailed explanation than currently given in the approval package 	<ul style="list-style-type: none"> Expected end of 2018. German GSK is being updated; it will be published afterwards via a Market Message 	IN PROGRESS

ANNEX 3 - Roadmap



DISCLAIMER: above planning is only a first set-up for planning. Timings of individual TSOs' readiness and readiness of external vendors/ suppliers still need to be confirmed. During 2019-Q1 a more firm planning can be provided.

Note that the requests regarding the updated Refprog, including non-CWE borders and publication of future outages are being discussed between CWE NRAS and TSOs and these are therefore not included in the above roadmap.